

# 2022-10-26 Meeting notes

## Date

26 Oct 2022

## Attendees

- Dave Hoffman
- [Steve Magennis](#)
- [Kyle Robinson](#)
- [Neil Thomson](#)
- [Judith Fleenor](#)
- [Eric Drury](#)

## Goals

- Minimum Viable Governance for 3 industry specific GHG / ESG Schemas (TCFD, SASB, TBD).
- Set the foundation for semantic transformation of GHG data i.e. one data point that can be used across different formats across an ecosystem.
- Incentivize an ecosystem of verifiers beyond the government.

## Notes

### Recording

- [Meeting Recording](#)

### Dave Note's

Kyle - Sr Advisor for BCGov

Use Hyperledger anon cred

Find data that can be turned into a schema

Regulations for the BC gov GHG initiative

Looking for governance for schemas like TCFD

Create, make public, simple data formats and models.

Not just GHG but broader ESG standards.

Driver is from a government regulatory perspective

Verifier is the Climate Action Secretariat

Wants to create a better pipe to the gov instead of a word or PDF file.

Data gets bed back to the provenances and can have separate regulations than federal

### Regulations

3rd party verification of ghg claims are required for companies that emit more than 25,000 metric tons

If they emit between 10,000 - 25,000 they need to self report

If they are under 10k they don't have to do anything

What is the bare minimum to make the pdf overlay regulations

Getting into the supply chain when the emissions come from

What are all the data sources who need to approve and signed

There are provincial and federal specific regulations that are unique.

There are presumptions of liability tied to those statements / claims which the assurers like PWC write but they include language that limits their responsibility tied to the claims.

Kyle wants to grow the ecosystem.

Education is the best way to do that

Create governance docs to credential formats and processes

Help them get a wallet from hyperledger aries or northern block

They want to become the center of excellence to point people in the right place.

Need a business license credential as well to set the organizational identity in place.

But more importantly we need to focus on the verifier.

The gov is a verifier, PWC is also a verifier, the verification of a claim

This will lead the way to trust registries

There needs to be an accreditation of 3rd party auditors

There is an ISO certification of some sort to become one

I am attesting to the validation of the organization

Ecosystem Growth

ESG investors, Gov, Enterprise

Modeling this after the EU Batter Passport and Alliance

Source minerals - copper - then have relevance for the London Stock Exchange then uses this data to make attribute claims for a premium price on the product

What data standard do they want - GRI, SASB, TCFD etc.

The ultimate question is what is the data and what format do you need it in.

Neil talked about overlapping value from his work on Semantic Transformation

The ability to translate data sets into these different formats.

Overlay Capture mechanisms

Data Modeling

Chain of Operations, who signed off

How is this tied to governance

Is this data true?

How do we want to get to an MVP / Minimum Viable Governance

Data Schemas and Formats - similar to something in academic research info

Trying to leverage a governance work that can crack the layer of tech for the verification

Minimum Viable Governance

Governance Docs around schemas & Credentials tied to the existing schemas on the market.

IOT sensor data is another consideration

How do we governance around that

User certification process

Separate Credential for the data & IOT device

## Neil's Notes

**\*\*Kyle Robinson\*\*** - senior advisor for BC gov env - GHG reporting - using hyperledger indi and anoncreds - what are the international standards for recording. BC has their own reporting process, including credentials (or is this actual data). Has created schemas for the "credentials". Adheres to standards bodies. How to interface with standards bodies for interoperability.

Even simple data formats and models adhere to GHG standards reportinging.

Applies to environmental, but also to ESG (which is beyond technical).

Provincial agencies feed to a Federal agency, which reports back.

3rd party (e.g., PWC) verifiers - using a word doc template - PDF it, and then sign it. which provides proof of their emmissions.

What is the bare minimum process, including mailing PDF forms.

Where does PWC get data -- from the company - which has data collected internally and from many providers, plus estimates, etc. Not close to that level of detail

Only looking at top level only - emission reports.

How would all data sources be approved and signed. Trust chain.

In addition to regulatory, there is also voluntary reporting. Example - ESG report - are the numbers in the report "true".

What is proved or not - a PDF can be changed in a minute.

BCGov looking at regulation - comparing them to the stuff on the ESG Reporting Schemas on the slide dec.

Need a 3rd party assurance organization to provide the report.

Lots of overlap in collection, assurance, etc.

Raw data are they same, the processing and result reports are different (if only packaged differently).

Regulations @ prov and fed - they are different - what does and doesn't need to be reporting and which standards to report to.

Over 25,000 metric tons of emissions must use a 3rd party assured report. Below that they need to do self-reporting to the government - what prevents inaccurate reporting.

Self reporting from 10,000 to 25,000

No reporting under 10,000

Frequently issues in data and reporting numbers between a company and 3rd party assurance organization. This means the certified data set ("credential") may change - that's an immutability problem. How to republish the data.

Trying to grow the ecosystem - writing governance (e.g., about credentials schemas/formats). Education

POC level - not production - looking for center of excellence for companies looking to comply within BC.

Using Indy Ledgers - public/private key

VCs written to the ledger

Not writing "it" to a block chain

Emphasizing focus on the verifier (confusing the term verifier vs. the relying party)

Verifier is overloaded - Assurer is a verifier and also an SSI actor.

Trust registries a topic - a 3rd party need gov't accreditation. Business license.

Data and processing needs to be "verifiable".

Signing a report includes assuming liability for the veracity of the information in that report.

PWC - This is verified to a reasonable level

What are you really trying to verify.

Are there organizations actually asking to verify the information. In EU Battery alliance as a model - want to be a source metal/mineral that contributes to that level. London Metals exchange - what data do they want and in what form. What is key to get into that market

How are they investors (London Meta Exchange) - they broker importation of metals into the EU - they are a gate keeper.

Who are investors -> who are the interested parties vs. who is putting up funding for development.

**\*\*Steve Magennis\*\*** - type of data, types of trust (different for industrial vs. personal data)

**\*\*David Hoffman\*\*** - legacy IT - health space - governance of emissions from health processes - integral to many reporting mechanisms as part of different industries - air, water, waste - for environmental impact. Dozens of different schemas for capture of pollution/ecology data.

Mandatory disclosure requirements

There are typically single organizations

Overlapping regulation - the Government drives what organizations must do.

**\*\*Eric Drury\*\*** - carbon trading, environmental - guide how this information is captured and published (reporting). Reporting requirements escalating. Supply chain is also part of this (emissions along the chain).

Industries looking for a solution to supply chain reporting.

Link to the overview]([https://docs.google.com/presentation/d/1iFs4JD7kv3omKobKXcHMOYCdp\\_3xkrVx4oUQ5rnmA3c/edit#slide=id.p](https://docs.google.com/presentation/d/1iFs4JD7kv3omKobKXcHMOYCdp_3xkrVx4oUQ5rnmA3c/edit#slide=id.p))

KPMG and other consultants are on the compliance requirements - are you responsible for these emissions

Direct, indirect, electricity, supply chain (90% of emissions in the supply chain)

Who is helping out industry to do this - a work in progress - EY, KPMG - materiality assessment

Lots of capacity and tools to solve this. Increase in SW companies to address

From Kyle:

Regulatory reporting info: <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/reporting>

The Word doc for third-party assurance: [https://www2.gov.bc.ca/assets/gov/environment/climate-change/ind/templates/emission\\_report\\_verification\\_statement.docx](https://www2.gov.bc.ca/assets/gov/environment/climate-change/ind/templates/emission_report_verification_statement.docx)

Our draft governance for the Verification Statement - this a level of governance: <https://github.com/bcgov/bc-vcpedia/blob/main/credentials/credential-bc-ghg-emissions-verification.md>

Steve Magennis - Am I convinced that the party who issued the credential now in front of me:

- Had at the time of issuance, sufficient authority to make the claims they made
- Had at the time of issuance, sufficient knowledge to make the claims they made
- Had at the time of issuance, sufficient capability to accurately convey the claims they made
- Had at the time of issuance, sufficient integrity to be truthful in making the claims they made

Has not changed their intent since making the claims they made (revocation or intentional changes to the original issuance)

new term - MVG - Minimum Viable Governance

Who wants to pick.

## CHAT

- Neil Thomson to Everyone (22:16)  
[https://docs.google.com/presentation/d/1iFs4JD7kv3omKobKXcHMOYCdp\\_3xkrVx4oUQ5rnmA3c/edit#slide=id.p](https://docs.google.com/presentation/d/1iFs4JD7kv3omKobKXcHMOYCdp_3xkrVx4oUQ5rnmA3c/edit#slide=id.p)
- Neil Thomson to Everyone (22:21)  
Going to need a terms and concepts wiki - eg., pointers/definitions to "Scope 1, 2, 3"
- Me to Everyone (22:22)  
Yes @Neil - will add that section to the wiki
- Me to Everyone (22:36)  
I've created a Terms and Concept page for this TF: <https://wiki.trustoverip.org/display/HOME/Greenhouse+Gas+Terms+and+Concepts>
- Judith Fleenor (Trust Over IP) to Everyone (22:39)  
Might I suggest you look into using the terms Wiki Tool from the CTWG for the task force.
- Me to Everyone (22:39)  
Yes Judith - we'll need a tutorial
- Judith Fleenor (Trust Over IP) to Everyone (22:40)  
Happy to facilitate setting that up for you, also I thing @Neil knows it well.
- Neil Thomson to Everyone (22:40)  
@ Eric, Judith - wiki's R US
- Kyle Robinson to Everyone (22:50)  
Regulatory reporting info: <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/reporting>  
The Word doc for third-party assurance: [https://www2.gov.bc.ca/assets/gov/environment/climate-change/ind/templates/emission\\_report\\_verification\\_statement.docx](https://www2.gov.bc.ca/assets/gov/environment/climate-change/ind/templates/emission_report_verification_statement.docx)

- Steve Magennis to Everyone (22:52)  
Am I convinced that the party who issued the credential now in front of me: • Had at the time of issuance, sufficient authority to make the claims they made • Had at the time of issuance, sufficient knowledge to make the claims they made • Had at the time of issuance, sufficient capability to accurately convey the claims they made • Had at the time of issuance, sufficient integrity to be truthful in making the claims they made Has not changed their intent since making the claims they made (revocation or intentional changes to the original issuance)
- Kyle Robinson to Everyone (22:54)  
Our draft governance for the Verification Statement: <https://github.com/bcgov/bc-vcpedia/blob/main/credentials/credential-bc-ghg-emissions-verification.md>
- Neil Thomson to Everyone (22:57)  
new term - MVG - Minimum Viable Governance

## Action items

